U. S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: September 10, 1988

Region II
Response and Prevention Branch
Edison, New Jersey 08837
(201) 548-8730 - Commercial & FTS
24 Hour Emergency

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TAT

POLREP NO.:	Thirty-nine (39)
INCIDENT/SITE NO.:	Arkansas Chemical Company/T9
POLLUTANT:	Textile chemicals and intermediates
CLASSIFICATION:	Major
SOURCE:	Abandoned chemical facility
LOCATION:	Newark, New Jersey
AMOUNT:	800 drums, 87 indoor and outdoor tanks containing oil, acid, and unknowns
WATER BODY:	None

1. SITUATION

A. The Arkansas Chemical Company produced textile and other specialty chemicals at its Newark facility until it was abandoned in 1983. Abandoned on this site are a two-story office/laboratory building (Bldgs. 25/30), a machine shop (Bldg. 26), a small chemical processing building (Bldg. 27), a large four-story chemical process building (Bldg. 28), a boiler room/tank house (Bldgs. 16 & 16B), a storage building (Bldg. 24), and two sheds (S1 & S2). About 1500 drums and 20,000 small containers of chemicals were left at this site at the time of its abandonment. In addition, there are approximately 17 aboveground storage tanks and 70 process tanks/reaction vessels.

2. ACTION TAKEN:

A. Listed below are the major waste streams of hazardous materials classified on-site and their current status. An estimated 6,300 gallons of liquid waste and 20 cubic yards of solid waste remain on-site.

1) Base/Neutral and Oxidizer Liquids, Oxidizer and Reactive Solids (28% of total waste streams) 9,000 gallons, 33 gallons, 5 gallons and 3 gallons respectively were mixed together in a bulking chamber. On 8/16/88, part of this waste stream was shipped for disposal but was later rejected by the facility. Approval was subsequently given by ThermalKem in South Carolina, and 7,200 gallons was shipped to them on 9/8/88. 2,000-3,000 gallons of sludge remain in the bulking chamber; this material will be solidified and disposed of as Base/Neutral Solids.

2) Flammable and Organic Liquids (13% of total waste streams) 2,745 gallons and 3,100 gallons respectively were mixed together in a bulking chamber. On 8/16/88, this material was shipped to Solvent Recovery Service (SRS), Linden NJ for disposal. The sludge material remaining in the bulking chamber was solidified, placed in seventeen 55 gallon drums, and shipped to ThermalKem for disposal on 9/1/88.

3) Acid Liquids (7% of total waste streams) 3,200 gallons of this material were shipped to ThermalKem via a 5,000 gallon vacuum truck on 8/25/88, completing removal of this material. Sludge remaining in the drums was bulked with the acid solid waste stream.

4) Cyanide Liquids (<1% of total waste streams) 44 gallons of this material were bulked and disposed of with the Base/Neutral Solids.

5) Peroxide Liquids and Solids (2% of total waste streams) 650 gallons and 10 gallons respectively of these materials were bulked in 20 overpacked drums and shipped for disposal to CyanoKem in Detroit, Michigan on 8/29/88.

6) Halogenated Organic Liquids (1% of total waste streams) 583 gallons (11 drums) of this material was overpacked and shipped on 8/29/88 to SRS for disposal.

7) Base/Neutral Solids (33% of total waste streams) 15,000 gallons of this material were staged in their original containers. Bulking of this material began on 8/27/88 with each drum being weighed to ensure that the maximuim allowable rolloff weight was not exceeded. A total of 6 rolloffs were shipped to CWM's Adams Center Landfill in Indiana from 8/29/88 to 9/9/88. Personal

protective clothing was also disposed of as part of this waste stream.

8) Acid Solids (9% of total waste streams) 4,200 gallons of this material were staged inside building 28. The pH was first raised by bulking the material in three rolloffs and mixing it with kiln dust. Disposal was completed on 8/27/88 at CWM's facility in Emelle, AL.

9) Cyanide solids (<1% of total waste streams) 90 gallons of this material were bulked and disposed of with the Base/Neutral Solids.

10) Organic and Flammable Solids (7% of total waste streams) 2,500 gallons and 575 gallons respectively were staged in their original containers. Many drums which were identified as being solid were found to contain liquid and were stabilized with "Drum-Dri". All 86 of these drums were then overpacked and shipped on 8/24/88 for disposal at ThermalKem in SC.

B. In addition to the chemical waste shipped from the site, the following material was also removed:

1) Approximately 900 empty steel drums were shipped to Kingsland Drum Co., a drum recycler in Newark, NJ. All drums will be incinerated to remove any residue or paint, then crushed and sold as scrap metal. This alternative is significantly more cost effective than landfilling as well as being more environmentally sound.

2) 39 cleaned wood pallets from the site were transferred to a nearby company for recycling purposes.

C. Aside from the main waste streams yet to be disposed of, the following material will require removal from the site and appropriate disposal:

1) The 9 specific wastes remaining from the lab packing operation. These wastes include explosives, mercury compounds and PCB's. Alternate disposal methods for these items are under way.

2) One gas cylinder remains on site. Disposal via manufacturer identification is under way.

3) All asbestos material has been stabilized in place and awaits final mitigation. Bids for removal services have been received from 4 companies and are currently being reviewed.

4) Two ampules of radioactive waste, tritium and thorium nitrate, are stored in Building 16B. The Radiation

Branch of the USEPA has been contacted and are in the process of obtaining the necessary permits for disposal.

5) 3 tanks found to contain aqueous waste and 1 formaldehyde tank were bulked in a pool outside Building 28. The analytical report on the sample taken indicates disposal via wastewater treatment is appropriate. Disposal is tentatively scheduled for the week of 9/19/88.

D. ERCS/TAT/EPA are actively reviewing disposal strategies and options for all waste streams remaining on site. These activities include; confirming RCRA compliance, pricing information, transportation coordination and determining treatment facility requirements.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. ERCS will perform final decon of buildings 28 and 28B and arrange for disposal of the waste water.

B. EPA/TAT will evaluate bids for asbestos removal and select the most appropriate bid.

4. FINANCIAL ACCOUNTING:

A.	Total Project Ceiling Authorized	$ 3,552,009
B.	Mitigation Contract Ceiling	$ 2,781,000
C.	Expenditures for Mitigation Contracts	
1. a.	Amount obligated to ERCS contractor for Delivery Orders #6893-02-073 and #7445-02-008 (DCNs KCS - 361, 629, 633, 710, 726, 730, KE - 0001, 0027, 0035 0044, 0045, 0083, 0101*, 0119) as of September 10, 1988	$ 2,472,380
1. b.	Amount de-obligated due to contract roll-over	$ 1,991
1. c.	Total amount obligated to date	$ 2,470,389
1. d.	Estimated mitigation expenditures as of September 8, 1988	$ 2,420,412
1. e.	Balance Remaining	$ 49,977
D.	Unobligated Balance Remaining	$ 310,611

* This money was switched from contingency funds to the mitigation ceiling ($50,000)

E.	Estimate of Total Expenditures to Date for All Mitigation Contracts	$ 2,420,412
F.	Other Extramural Costs as of September 10, 1988	
	1. a. TAT Salary/Travel (estimated)	$ 119,000
	b. Analytical Costs	$ 6,628
G.	Intramural Costs as of September 10, 1988	
	1. a. EPA (Estimated Direct and Indirect)	$ 102,475
H.	Total Expenditures	$ 2,648,515
	Percent of Total Project Ceiling	75%

FINAL POLREP_____ POLREPS FORTHCOMING __X__ SUBMITTED BY: Mark P. Pane

Mark P. Pane, OSC
Response and
Prevention Branch

DATE RELEASED: September 10, 1988